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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,988	03/22/2001	Jurgen Michel	112740-156	1225
29177	7590	08/09/2004	EXAMINER	
BELL, BOYD & LLOYD, LLC P. O. BOX 1135 CHICAGO, IL 60690-1135			PHU, PHUONG M	
			ART UNIT	PAPER NUMBER
			2631	

DATE MAILED: 08/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/787,988

Applicant(s)

MICHEL ET AL.

Examiner

Phuong Phu

Art Unit

2631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 14 May 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 13-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13, 14, 21, 23 and 24 is/are rejected.
- 7) ☒ Claim(s) 15-20 and 22 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Priority***

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the functional/operational flow chart(s) of the methods claimed in claims 13-24 and/or diagram(s) of the functional apparatus associated with the claimed methods must be shown. No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claim 24 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 24 recites the limitation “a spreading code, which has an essentially non-vanishing cross-correlation with a spreading code of a paging channel, is used only if no other spreading

Art Unit: 2631

code is available". This limitation is not disclosed in the Specifications of the instant application.

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claim 21 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 21 recites the limitation "the receiver **can** be turned off over coherent periods of time which are as long as possible". The language "can be turned off" is not a definite language to indicate whether the "receiver" is necessary to be turned off over coherent periods of time which are as long as possible.

7. Claim 24 is rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

Claim 24 is narrative in form and do not contain positively recited steps of a specific process. Note that method claims should set forth a series of steps in the active tense in an instruction-like manner thereby reciting an actual method. Dependent claims should further limit base claims by reciting additional steps in a likewise fashion. Ex parte Erlich 3USPQ2d 1011 at 1017[6].

### ***Claim Rejections - 35 USC § 102***

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 2631

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

9. Claims 13 and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by Ozluturk (5,748,687).

-As per claim 13, see figure 2 and col. 4, line 56 to col. 8, line 49, Ozluturk discloses a method (see figure 2) comprising:

step (201, 202) of receiving a spread-spectrum signal keyed with a first spreading code "long sequence" (see col. 4, lines 56-59);

step (203, 205, 204, 206) of using a second spreading code "short code" which is shorter than the first spreading code to receive the spread-spectrum signal (see col. 4, lines 56-66, col. 6, lines 63-67, and col. 7, line 20 to col. 8, line 48); and

step (203, 204) of correlating the spread-spectrum signal with the second spreading code.

-As per claim 14, Ozluturk discloses step of defining the second spreading code "short code" to be a code segment of the first spreading code "long sequence" (see col. 4, lines 56-66).

Art Unit: 2631

10. Claims 13 and 23 are rejected under 35 U.S.C. 102(e) as being anticipated by Sriram et al (6,226,315).

-As per claim 13, see figure 5 and col. 7, lines 24-58, Sriram et al discloses a method comprising:

step ((Stage 1) (see col. 7, lines 50-53)) of receiving a spread-spectrum signal keyed with a first spreading code "LC<sub>j</sub>" (see col. 7, lines 26-29);

step (Stage 1) of using a second spreading code "SC<sub>0</sub>" which is shorter than the first spreading code to receive the spread-spectrum signal (see col. 7, lines 26-35 and 50-53); and

step (Stage 1) of correlating the spread-spectrum signal with the second spreading code.

-As per claim 23, see figure 5 and col. 7, lines 24-58, Sriram et al discloses a method (see figure 5) comprising:

step (see col. 7, lines 24-28) of spreading a spectrum of message signals for the plurality of receivers in a plurality of cells via a plurality of first spreading codes (LC<sub>j</sub>) which are respectively different for each of the plurality cells;

step (see col. 7, lines 26-35) of spreading a spectrum of message signals which are intended for a plurality of cells via a further first spreading code (SC<sub>0</sub>) which is common to all of the plurality of cells;

step (figure 5) of selecting the plurality of first spreading codes C wherein a plurality of second spreading codes (SC<sub>1</sub>,... , SC<sub>pg-1</sub>) respectively associated with the plurality of first spreading codes have as low as possible a correlation with the further first spreading code (SC<sub>0</sub>) (see col. 7, line 32-35); and

Art Unit: 2631

step (see col. 7, lines 26-32) of defining the plurality of second spreading codes to be shorter than the plurality of first spreading codes.

***Claim Rejections - 35 USC § 102/103***

11. Claim 24 is rejected under 35 U.S.C. 102(e) as being anticipated by Sriram et al, or rejected under 35 U.S.C. 103 as being unpatentable over Sriram et al.

As per claim 24, see figure 5 and col. 7, lines 24-58, Sriram et al discloses a transmission method wherein a spreading code ( $SC_0$ ) is inherently is selected or would be obvious to be select among spreading codes ( $SC_0, SC_1, \dots, SC_{pg-1}$ ) to be used as the common short code (CSC) if other spreading codes ( $SC_1, \dots, SC_{pg-1}$ ) are already assigned for the traffic channel (TCH's) (see figure 5), namely, when no other spreading codes available except the spreading code ( $SC_0$ ); wherein the spreading code ( $SC_0$ ) inherently has a cross-correlation with a spreading code ( $LC_j$ ) used for a channel.

***Allowable Subject Matter***

12. Claims 15-20 and 22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

13. Claim 21 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Art Unit: 2631

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuong Phu whose telephone number is 703-308-0158. The examiner can normally be reached on M-F (8:30-6:00) First Monday Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mohammad Ghayour can be reached on 703-306-3034. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Phuong Phu*

Phuong Phu  
06/03/04

Phuong Phu  
Primary Examiner  
Art Unit 2631

**PHUONG PHU  
PRIMARY EXAMINER**